

## **Marion Clawson's Contribution to Forestry**

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## **Abstract**

Marion Clawson passed away in April 1998 at the age of 92. He was a giant in the field of resource and environmental economics who devoted the last decade and one-half of his professional career to forest and forest related issues. He produced over 30 professional books and hundreds of papers. This paper presents a broad overview of his career as an economist, with a focus on his work in and influence on forestry and forest policy. From the early 1970s through to his last professional book in 1983, and his final professional contributions in the mid 1990s, Clawson devoted most of his professional efforts to forest issues. His influence on forests and forest policy was substantial, especially in the context of public policy toward America's publicly owned forested lands. He served as an external critic of the Forest Service, regularly calling for greater attention to be given to issues of economic efficiency in the management of public lands. His influence was probably greatest during the period from the early 1970s, when his service on the President's Advisory Panel on Timber and the Environment stimulated his interest in forestry, through the mid 1980s. During this period he authored several books on forestry and a number of influential articles.

**Key Words:** Marion Clawson, forest, economics, resources, policy, timber, recreation, history

**JEL Classification Numbers:** B31,Q10, Q20, Q23, Q24, Q26, Q28

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# MARION CLAWSON'S CONTRIBUTION TO FORESTRY

Roger A. Sedjo<sup>1</sup>

## I. INTRODUCTION

For 20 years Marion Clawson and I were colleagues at Resources for the Future. I first met Marion when I began my career at RFF in the late 1970s. At that time he was over 70 years old and ostensibly retired. I knew of Marion by virtue of his professional reputation, and I also knew that he was still among the most active and productive researchers at RFF. Of course, Marion never really retired.

During my first decade at RFF Marion was in the office early every morning. He produced about one book every year and a half. At any point in time Marion had one book that was at the publisher, another in the process of being written, and one book in the preliminary "thinking" stages. Over the next ten years Clawson authored five more books, the final one in 1987 being his memoirs. He remained a close colleague, continued to write occasional papers, and came regularly to his office until his death last spring at 92 years of age.

Marion was a remarkable man. His life covered almost the entire 20th century. His interests spanned a host of important areas and topics, most if not all of them having to do with the interaction between human beings and natural resources.

## II. MARION CLAWSON'S EARLY YEARS

Marion Clawson was a product of western America, growing up on a small ranch in Nevada. His early memories were of life on the ranch where his father was a rancher and miner. Marion's interest in ranching was reflected in his academic work. He received his Bachelor of Science in Agriculture in 1926 and a Master of Science in Agricultural Economics in 1929, both from the University of Nevada. He would go on to have in essence, two full careers. His first career was as a civil servant, initially in the Department of Agriculture. His early years were spent doing agricultural research in the west. Eventually, he moved to Washington. During the Second World War Clawson earned a Ph.D. in economics from Harvard University. In 1947 he joined the Bureau of Land Management and became its director in 1948. In 1953 he was fired as director of the BLM by the new incoming Republican administration, a fact of which he was quite proud.

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### III. MARION CLAWSON AT RFF – HIS FORAY INTO FORESTRY

After spending two years in Israel as a member of a foreign Economic Advisory Staff, Marion began his second career as a researcher with Resources for the Future. He had published three books prior to his tenure at RFF. The first two, published in 1947 and 1950, were about agriculture. In his third book, *Uncle Sam's Acres* (1951), he shifted his focus to the topic that would become the subject of the majority of his work from that point, public lands. His initial RFF book (with R. B. Held) was about land, *The Federal Lands: Their Use and Management* (1957). During the first part of his RFF career, roughly the period 1955 through to the early 1970s, Clawson's work covered a host of topics, including agricultural, soil conservation, and urban land policy. However, the principal focus of his work was on land issues and outdoor recreation; his contributions to these areas were substantial.

In 1973 Clawson had his first major involvement in forestry as one of several authors of the "Report of the President's Advisory Panel on Timber and the Environment." Although the Report was that of the Advisory Panel, Marion personally wrote much of it. Marion had been approached by Paul McCracken, Chairman of the President's Council of Economic Advisors, to participate on the panel. Although Clawson protested that he had little experience in forestry, McCracken persisted and Clawson participated. At the time the Report was not overwhelmingly influential. It had been delivered personally by the Panel members to President Nixon just as the Watergate hearings were heating up. The Report got lost in the general chaos of that time. Years later, however, Marion opined that he believed that the Report had a significant affect on the development of the National Forest Management Act, which was passed a few years later in 1976.

The experience marked a defining point in Clawson's already diverse and illustrious career. After that Panel Report, Marion went on to write eleven more books, eight of them on forestry. Later, Emery Castle, RFF's President, confided to me that after the Panel Report he had occasionally suggested to Marion that he might return to some of his earlier interests. "But," Castle said, "Marion just doesn't seem to be interested in anything but forestry."

Perhaps his most influential book on forestry is *Forests for Whom and for What?*. In this 1975 book, Clawson addressed public forestland issues ranging from timber production to timberland withdrawals from harvest. He not only addressed issues of economic efficiency, but he also covered cultural and social acceptability, as well as the income distributional consequences of forest production. In many respects this modest book was an early primer on forests economics, forest issues and forest policy. Although *Forests for Whom and for What?* was published almost three decades ago, it is still frequently cited in the literature.

Much of Clawson's work on forests focused on the public forestland and on the National Forest System. His books in this area include *Forest Policy for the Future* (1974), *The Economics of National Forest Management* (1976) and *The Federal Lands Revisited* (1983). Marion's concerns involved questions of "to what uses lands should be put" and "how best to manage lands for those ends." In this context the mix of federal, state and private lands is important. Also important is the question of how many federal dollars should be expended on various desired uses, and how these lands could be managed efficiently to meet

these desired ends. And finally, if land disposal or acquisition by the federal estate were desired, how could this best be accomplished?

The peak of Clawson's influence on forestry probably came during the late 1970s and early 1980s. In his final book on forestry, *The Federal land Revisited* (1983), Clawson again addressed issues of the management of the federal forests. Two very influence articles in the journal *Science* preceded this book. In the first article, "The National Forests--A Great National Asset Is Poorly Managed and Unproductive," published in 1976, Clawson argued that the National Forest Service devoted too many resources to poor lands and too few to high productivity sites. In the second, "Forests in the Long-Sweep of American History" (1979), Clawson showed how the nation's forests had recovered, far beyond what had been anticipated even by the most optimistic analysts, from earlier logging and land-clearing abuses. His argument was that the American forests were in far better condition than was commonly supposed, in large part due to their natural resiliency, which he felt was consistently underestimated. This "discovery" of a healthy and dynamic U.S. forest system has recently been made once again by the *Journal of Industrial Ecology* in the article "Searching for Leverage to Conserve Forests: The Industrial Ecology of Wood Products in the U.S." by Wernick et al. (1998).

As we have already noted, many of Marion's forays into forestry drew attention to inefficient public management practices. Using the agricultural model developed in his early training he concluded that inputs were justified only if they generated outputs that were of greater value. He criticized the Forest Service for spending large amounts of money to improve forests on marginal sites. He also criticized the FS for not maintaining an appropriately high level of harvest on public lands. He was not alone in this criticism. In his 1983 book he noted with approval that "the Office of Management and Budget (OMB) and the General Accounting Office (GAO) have repeatedly pressured the Forest Service into making larger timber sales in order to accelerate the rate of harvest of old-growth timber." (p. 82). After all, in the early 1980s, with the absence of the widespread perspective that old-growth stands were inherently valuable, most economists maintained that rational efficient multiple-use management should include the felling of most of these trees for timber use and subsequently regenerating lands for further forest harvests. Old growth values could be captured in protected areas that were already set-aside. The issues of the time, then, appeared to involve questions like how rapidly old growth ought to be liquidated, how best to regenerate the forest, and how to do all this cost effectively.

It was only toward the latter part of the 1980s that the spotted owl seriously entered the discussion of old growth forest values and substantially modified the ongoing debate though the constraints of the Endangered Species Act and the de facto set aside of large areas of old growth forest. Nevertheless, if one of the roles of the FS was to produce timber, and Marion argued that this mandate went back to the Forest Reserve Act of 1891 (see Clawson 1983, p. 72) then, "by god," as Marion would say, they ought to do it efficiently.

Clawson tended to view the 1976 National Forest Management Act with cautious approval. Like John Krutilla, another giant in the field of forest economics whose career

coincided with Clawson's at RFF, he read the 1976 Act as requiring management consistent with economic maximization broadly interpreted (Clawson 1983, p. 181). However, he was uncomfortable with the planning language, noting that "while requiring such balancing of costs and benefits in the planning process," it "only implicitly (not explicitly) requires that the resultant plans shall govern the actual administrative actions of the Forest Service" (p. 181). This problem was rediscovered in a recent GAO Report (1997), where the GAO noted the prevalent absence of implementation, and is also noted in the Committee of Scientists Report (1999).

Perhaps one of Clawson's most unique intellectual traits was the ability to look at a well-recognized problem from a slightly different perspective. Time and time again he would challenge conventional wisdom by taking an unconventional view of a problem and coming up with an unorthodox but useful perspective. For example, Clawson's 1978 book, *The Economics of U.S. Nonindustrial Private Forests*, demonstrated that much of the difference in productivity between the National Forests and the poorly regarded nonindustrial private forests (NIPFs) was due to location and age, not management. He noted that the NIPFs are found disproportionately in regions poorly blessed by climate and other characteristics that generate high biological growth. Once adjustments are made for these considerations, the NIPFs perform comparably with National Forests. These findings were not always well accepted, and I myself was drawn into some of the rancorous debates, both formal and informal, that ensued. Marion's perspective did, however, generate a surge in papers and research on these important forests, which constitute 58 percent of the United States total forested area.

Marion's views might best be characterized as those of a "wise use" conservationist. Having grown-up in Nevada, the son of a miner/rancher who just barely eked out a living from the earth (Clawson 1987), he viewed resources as something to be utilized. His training as an economist served to add emphasis and rigor to his concerns over the importance of the efficient utilization of resources. Resources were to be used--sustainably yes, but used.

Clawson, however, did appreciate the nontimber values of the forest and supported the idea of multiple-use management. As noted, much of his early work at RFF was focused on outdoor recreation and its valuation. Furthermore, he understood that a major rationale of public ownership of forestlands was based upon the desire for multiple-use outputs, many of which were not valued in the market and were therefore unlikely to be produced in appropriate quantities by the market (see Clawson 1983, pp. 136-142).

Clawson also recognized the value and role of parks and wilderness. Here again, to him the issue was not whether to establish parks and wilderness, but rather how much and what type of natural areas should be established as such. On several occasions his writings addressed the question of how much forest should be retained and how much and what type of lands ought to be put off limits to harvesting (e.g., see Clawson 1975, pp. 7, 8, 158, 159). Even though Marion's belief in non-timber values and the importance of wilderness to society was strong, he retained the belief that an important role of the National Forest Service, as explicitly stated in the Forest Reserve Act and the Organic Act, was to provide for future



timber requirements (e.g., see Clawson 1983, pp. 72-77). As the country approached the latter decades of the 20th Century, he believed that it was appropriate to utilize those resources.

Although he held very strong opinions, Marion had the admirable ability to rethink his positions. As stated above, he was a "wise use" conservationist who I would characterize as what might be termed a "New Deal" Democrat. He saw an important role for the federal lands and devoted much of his life's work to studying and analyzing how they might best fulfill that role. Thus, it came as somewhat of a surprise that he seriously considered some of the arguments for the privatization of the public lands which were articulated in the early Reagan years.

In his 1983 book, Clawson analyzed the pros and cons of privatization of parts of the federal estate. From my private conversations with Marion I have surmised that some of the reluctant enthusiasm that he exhibited for privatization reflected, in part, his frustration with much of federal management. Also, he recognized from his understanding of land history that at times the federal government had acquired lands and at other times it focused on land disposal. It is worth noting that all of the alternatives he suggested and examined: (retention in federal ownership with strenuous efforts to improve their management, transfer to the states, privatization of all or major parts of the NFS, transfer to public or mixed public-private corporations, and long-term leasing) were assessed in terms of their ability to provide more efficient land management (Clawson 1983, p. 177).

Although Clawson was not always a consistent "friend" of the Forest Service, neither was he a consistent "friend" of the environmentalist. Being a "wise use" conservationist, Clawson never developed a real appreciation for the position of what he called "preservationists," which I have always interpreted to mean in his view "extreme" environmentalists. Like other economists, he was concerned with balancing alternative and sometime conflicting values and he tended to reject views that focused exclusively on a single value--whether they came from preservationists or timber beasts.

Marion also had the ability to recognize his mistakes. A number of times Marion acknowledged how badly he had misinterpreted the public forest experience of the 1950s. The increasing federal harvests of that period, and the associated increased revenues, had suggested to him that the Forest Service could actually cover the costs of its operations, and perhaps would shortly generate net revenues to the Treasury through its management of timber (see Clawson and Held 1957). At the beginning of the century, Pinchot had promised that the FS could and would generate net revenues from forestry. It was this potential that was used to justify the view of the FS as a different and special type of agency. It was to provide outputs as well as maintain and protect the forest. It was this perspective that provided the rationale for locating the FS in the Department of Agriculture, whose responsibility also included production and investments in the land. However, Pinchot had never been able to deliver on the promise to make forestry pay. Similarly, Clawson's expectations did not anticipate the increased interest in environmental issues and wilderness that would take place in the 1960s and beyond. These interests created pressure for lower

timber harvests and greater forestland set-asides, a trend that was inconsistent with his expectation of increasing net revenues to the Treasury.

#### **IV. MARION CLAWSON'S LEGACY**

Marion leaves a considerable profession legacy. He was a pioneer, one of the founding fathers, in what is now the discipline of resource and environmental economics. He leaves a legacy of over thirty professional books and literally hundreds of published papers, which have contributed to the development of the profession and are partly responsible for where the profession is today, for the choice of problems it examines and how it looks at issues. Clawson recognized that resources were limited, and believed that they should be used efficiently by both private and public users. He also understood that there were values that were in essence economic values beyond those recognized and traded in the market. He contributed to the methodology that address such issues and, even today, the "travel cost" method of estimating a demand curve for recreation is frequently referred to as the Clawson Demand Curve. Yet he could never be accused of being in an "ivory tower." Methods were developed with the intention of being applied to the problems of the real world. Throughout the duration of his career Clawson was principally concerned with real world problems.

He saw a role for governments in explicitly managing for those values that were not well represented in markets. This included forest resources, which generate a mix of outputs, both market and nonmarket. But, he also saw that bureaucracies often tended to lose sights of the purposes for which they were created and often neglected to be truly concerned about the "wise use" of resources.

Clawson brought a candor and honesty to his profession. Throughout his professional career, and indeed as best I can judge, throughout his personal life as well, Marion "called it as he saw it." Within his profession he was forthright, sometimes almost blunt, but still gentle. He was never mean-spirited. There was a civility in his professional behavior that we would do well to try to emulate today.

#### **V. CLOSING**

Although Marion became less involved in the daily goings on at RFF in his later years, he was scheduled to attend my Forestry Economics and Policy Program Advisory Committee meeting in May of 1998. He had not missed one of these meetings in the previous 20 years; sadly, we lost him one month before that meeting.

Over his last several years Marion had faithfully visited the office for a couple of hours every Wednesday morning: to pick up his mail, have a letter typed, or chat briefly with the fellow researchers and staff. Shortly before his passing he shared with me a suggestion of his son Pat who was concerned that, at the age of 92, Marion was still driving through the morning rush hour traffic to get to the office. Pat had said "Dad, there are taxies that you can take to and from work." Marion, pretending irritation said, "I told Pat, 'Pat, I know there are taxies, and when I need a taxi I will call a taxi'." He never did call that taxi. And this is the way I will always remember him.

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